

Appln. Serial No. 09/945,193  
Request for Continued Examination Dated April 30, 2007

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AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

1 1-27. (Cancelled)

1 28. (Currently Amended) A method executed by a computer, comprising:  
2 determining ~~a-cost costs~~ of mis-predicting each of a set of parts that may be replaced  
3 during an onsite repair of a product in response to a repair history, wherein the costs are  
4 computed based on probabilities of over-predicting and under-predicting the parts;  
5 selecting a subset of the parts to be sent to the onsite repair in response to the costs.

1 29. (Currently Amended) The method of claim 28, wherein computing the costs based on the  
2 probabilities of over-predicting the parts comprises computing the costs determining a cost  
3 includes determining a cost associated with unnecessarily sending the corresponding parts part to  
4 the onsite repair.

1 30. (Currently Amended) The method of claim 28, wherein computing the costs based on the  
2 probabilities of under-predicting the parts comprises computing the costs determining a cost  
3 includes determining a cost associated with not sending the corresponding parts part when  
4 needed to the onsite repair.

1 31. (Cancelled)

Appln. Serial No. 09/945,193  
Request for Continued Examination Dated April 30, 2007

1    32. (Currently Amended) The method of claim 31, A method executed by a computer,  
2    comprising:  
3        determining costs of mis-predicting parts that may be replaced during an onsite repair of  
4    a product in response to a repair history;  
5        selecting a subset of the parts to be sent to the onsite repair in response to the costs; and  
6    identifying a set of symptoms associated with the product,  
7        wherein determining the costs comprises determining a cost of mis-predicting a subgroup  
8    of the parts comprises determining the cost in response to the symptoms according to parameters  
9    indicating at least:  
10          (1) a number of trips that the set of symptoms were reported, the subgroup of  
11    parts were sent, and at least one part not in the subgroup of parts was needed to complete the  
12    onsite repair; and  
13          (2) a number of trips that the set of symptoms were reported, the subgroup of  
14    parts were sent, and the subgroup of parts included at least one part that was unnecessary in the  
15    onsite repair.

1    33. (Currently Amended) The method of claim 28, wherein computing the costs based on the  
2    probabilities of over-predicting and under-predicting is according to determining a cost includes:  
3        determining a number numbers of times that the corresponding parts were each part was  
4    under-predicted;  
5        determining a number numbers of times that the corresponding parts were each part was  
6    over-predicted;  
7        determining a number numbers of times that the corresponding parts were each part was  
8    correctly predicted.

Appln. Serial No. 09/945,193

Request for Continued Examination Dated April 30, 2007

1 34. (Currently Amended) The method of claim [[31]] 33, further comprising:  
2       computing the probabilities of under-predicting the parts using wherein determining a  
3       cost includes combining the numbers of times that the parts were under-predicted; and  
4       computing the probabilities of over-predicting the parts using the numbers of times the  
5       parts were over-predicted with a cost associated with under predicting the parts and a cost  
6       associated with over predicting the parts.

1 35. (Cancelled)

1 36. (Currently Amended) The method of claim [[35]] 28, wherein determining the costs  
2 includes determining an average of the costs associated with under-predicting and over-  
3 predicting the parts.

1 37. (Currently Amended) The method of claim 28, wherein selecting [[a]] the subset of the  
2 parts includes selecting [[a]] the subset of the parts for transport to the onsite repair.

1 38. (Currently Amended) The method of claim 28, wherein selecting [[a]] the subset of the  
2 parts includes selecting [[a]] the subset of the parts for training of call qualifiers.

1 39. (Currently Amended) The method of claim 28, wherein selecting [[a]] the subset of the  
2 parts includes selecting [[a]] the subset of the parts for flagging to call qualifiers.

1 40. (Currently Amended) The method of claim 28, wherein selecting [[a]] the subset of the  
2 parts includes selecting [[a]] the subset of the parts for stocking a repair vehicle.

1 41. (Previously Presented) The method of claim 28, further comprising determining which  
2 products are least desirable to support in response to the costs.

1 42. (Previously Presented) The method of claim 28, further comprising determining which  
2 personnel to target for additional training in response to the costs.

Appln. Serial No. 09/945,193  
Request for Continued Examination Dated April 30, 2007

1 43. (Currently Amended) An apparatus having a computing device that determines ~~a cost~~  
2 ~~costs~~ of mis-predicting each of a set of parts that may be replaced during an onsite repair of a  
3 product in response to a repair history and that selects a subset of the parts to be sent to the onsite  
4 repair in response to the costs,

5 wherein the costs are computed based on probabilities of over-predicting and under-  
6 predicting the parts.

1 44. (Currently Amended) The apparatus of claim 43, wherein the computing device  
2 computes determines the costs based on the probabilities by determining a number numbers of  
3 times that the corresponding parts were each part was under-predicted and a number numbers of  
4 times that the parts were each part was over-predicted and determining a number numbers of  
5 times that the corresponding parts were each part was correctly predicted.

1 45. (Currently Amended) The apparatus of claim 43 An apparatus having a computing  
2 device that determines costs of mis-predicting parts that may be replaced during an onsite repair  
3 of a product in response to a repair history and that selects a subset of the parts to be sent to the  
4 onsite repair in response to the costs.

5 wherein the computing device determines costs comprise a cost of mis-predicting a  
6 subgroup of the parts according to parameters indicating at least:

7 (1) a number of trips that a set of symptoms were reported, the subgroup of parts  
8 were sent, and at least one part not in the subgroup of parts was needed to complete the onsite  
9 repair; and

10 (2) a number of trips that the set of symptoms were reported, the subgroup of  
11 parts were sent, and the subgroup of parts included at least one part that was unnecessary in the  
12 onsite repair the costs in response to a set of symptoms associated with the onsite repair.

1 46. (Previously Presented) The apparatus of claim 43, wherein the repair history includes an  
2 identification of a set of parts sent to a set of prior onsite repairs and a list of actual parts needed  
3 in the prior onsite repairs.

Appln. Serial No. 09/945,193  
Request for Continued Examination Dated April 30, 2007

1 47. (Cancelled)

1 48. (Currently Amended) The apparatus of claim 43, wherein the costs determined by the  
2 computing device comprise determines a waste metrics metric for a plurality of sets of parts and  
3 the subset of parts selected comprises less than all selects the sets of parts for the onsite repair in  
4 response to the waste metrics metric.

1 49. (Previously Presented) The apparatus of claim 43, wherein the parts are selected for  
2 transport to the onsite repair.

1 50. (Previously Presented) The apparatus of claim 43, wherein the parts are selected for  
2 training of call qualifiers.

1 51. (Previously Presented) The apparatus of claim 43, wherein the parts are selected for  
2 flagging to call qualifiers.

1 52. (Previously Presented) The apparatus of claim 43, wherein the parts are selected for  
2 stocking a repair vehicle.

1 53. (Previously Presented) The apparatus of claim 43, wherein the computing device  
2 determines which products are least desirable to support in response to the costs.

1 54. (Previously Presented) The apparatus of claim 43, wherein the computing device  
2 determines which personnel to target for additional training in response to the costs.

1 55. (New) The method of claim 28, wherein determining the costs of mis-predicting the parts  
2 is for a particular onsite repair of a particular product, and wherein selecting the subset of the  
3 parts is for the particular onsite repair of the particular product.

Appln. Serial No. 09/945,193  
Request for Continued Examination Dated April 30, 2007

1 56. (New) The method of claim 28, wherein determining the costs of mis-predicting parts  
2 comprises determining the costs of mis-predicting corresponding sets of parts.

1 57. (New) The method of claim 56, wherein selecting the subset of parts comprises selecting  
2 less than all of the sets of parts.

1 58. (New) The method of claim 28, wherein determining the costs of mis-predicting  
2 comprises determining expected wastes for the corresponding parts, wherein each expected  
3 waste is computed based on a number of times the corresponding part was under-predicted, a  
4 number of times the corresponding part was over-predicted, a number of times the corresponding  
5 part was correctly predicted, a cost of over-predicting the corresponding part, and a cost of  
6 under-predicting the corresponding part.

1 59. (New) The method of claim 28, wherein computing the costs based on the probabilities  
2 of over-predicting and under-predicting takes into account a cost of an extra trip to a repair site  
3 and a cost of one of restocking and storing an unneeded part.

1 60. (New) The method of claim 28, wherein selecting the subset of parts comprises selecting  
2 less than all the parts.

1 61. (New) The apparatus of claim 43, wherein the costs of mis-predicting comprise expected  
2 wastes for the corresponding parts, and wherein each expected waste is computed based on a  
3 number of times the corresponding part was under-predicted, a number of times the  
4 corresponding part was over-predicted, a number of times the corresponding part was correctly  
5 predicted, a cost of over-predicting the corresponding part, and a cost of under-predicting the  
6 corresponding part.